

1. A 911 emergency voice/data telecommunication network, including:
  - a caller device originating a 911 emergency call having a voice portion and a data portion, wherein the caller device captures sound and image information from the vicinity of the caller device and communicates the captured sound and image information in the 911 emergency call, at least part of the captured sound and image information being communicated in the data portion of the 911 emergency call;
  - a local service interface in communication with the caller device and adapted to receive the 911 emergency call and separately route the voice portion and the data portion through the 911 emergency voice/data telecommunication network to an appropriate emergency service organization;
  - a public voice network in communication with the local service interface and adapted to receive the voice portion of the 911 emergency call from the local service interface;
  - a public data network in communication with the local service interface and adapted to receive the data portion of the 911 emergency call from the local service interface; and
  - an emergency services network in communication with the public voice network and the public data network and adapted to receive the voice portion of the 911 emergency call from the public voice network and the data portion of the 911 emergency call from the public data network, wherein the emergency services network determines the appropriate emergency service organization to receive the 911 emergency call, communicates the appropriate emergency service organization for receiving the 911 emergency call to the local service interface via at least one of the public voice network and public data network, and dispatches the voice portion and data portion of the 911 emergency call to the appropriate emergency service organization.

2. The 911 emergency voice/data telecommunication network as set forth in claim 1, the caller device including:

- a microphone to capture the sound information from the vicinity of the caller device.

3. The 911 emergency voice/data telecommunication network as set forth in claim 2 wherein the captured sound information is communicated in the data portion of the 911 emergency call.

4. The 911 emergency voice/data telecommunication network as set forth in claim 1, the caller device including:

a camera to capture the image information from the vicinity of the caller device.

5. The 911 emergency voice/data telecommunication network as set forth in claim 4 wherein the captured image information includes at least one of a still frame image, a sequence of still frame images, or motion video.

6. The 911 emergency voice/data telecommunication network as set forth in claim 5 wherein the captured image information is communicated in the data portion of the 911 emergency call.

7. The 911 emergency voice/data telecommunication network as set forth in claim 1, the caller device including:

a 911 button wherein the 911 emergency call is originated after activation of the 911 button.

8. The 911 emergency voice/data telecommunication network as set forth in claim 7, the caller device further including:

a safety mechanism in operative communication with the 911 button wherein the 911 emergency call is originated after operation of the safety mechanism in a predetermined relation to activation of the 911 button.

9. The 911 emergency voice/data telecommunication network as set forth in claim 1 wherein the 911 emergency call is originated by subscriber MS configuration.

10. The 911 emergency voice/data telecommunication network as set forth in

claim 1 wherein origination of the 911 emergency call includes communication of an origination request message specifying a 911 emergency call service option from the caller device to the local service interface.

11. The 911 emergency voice/data telecommunication network as set forth in claim 10 wherein the local service interface responds to the 911 emergency call service option by allocating resources to the 911 emergency call with priority over non-emergency calls.

12. The 911 emergency voice/data telecommunication network as set forth in claim 1 wherein the caller device adds a timestamp to the captured sound and image information communicated in the 911 emergency call.

13. The 911 emergency voice/data telecommunication network as set forth in claim 1 wherein the local service interface includes at least one of a local landline telephone service, a cellular telephone service, a satellite telephone service, a satellite service, a cable service, and an Internet service.

14. The 911 emergency voice/data telecommunication network as set forth in claim 1, the emergency services network including:

a 911 voice/data network adapted to receive the voice portion and data portion of the 911 emergency call; and

an automatic location identification database in communication with the 911 voice/data network storing location information relating caller devices to the appropriate emergency service organization;

wherein the 911 voice/data network determines the appropriate emergency service organization for the 911 emergency call by retrieving location information from the automatic location identification database associated with the caller device, wherein the appropriate emergency service organization is responsible for providing emergency service to the caller device based on the location of the caller device.

15. The 911 emergency voice/data telecommunication network as set forth in claim 14, the appropriate emergency service organization including:

a public safety answering point responsible for providing emergency service to the caller device based on the location of the caller device and including a 911 operator station adapted to receive at least one of the voice portion and data portion of the 911 emergency call; and

at least one of a law enforcement station, a fire department station, an emergency medical service station, a law enforcement mobile unit, a fire department mobile unit, an emergency medical service mobile unit, a military emergency response organization, and a military mobile unit wherein each station and each mobile unit is adapted to receive the voice portion and data portion of the 911 emergency call;

wherein the 911 operator station dispatches the voice portion and data portion of the 911 emergency call to at least one of the law enforcement station, fire department station, emergency medical service station, law enforcement mobile unit, fire department mobile unit, emergency medical service mobile unit, military emergency response organization, or military mobile unit based on interpretation of an emergency situation associated with the 911 emergency call.

16. A 911 emergency voice/data telecommunication network, including:

a base station adapted to receive a 911 emergency call originated by a mobile station, the 911 emergency call having a voice portion and a data portion, wherein the mobile station captures sound and image information from the vicinity of the caller device and communicates the captured sound and image information in the 911 emergency call, at least part of the captured sound and image information being communicated in the data portion of the 911 emergency call;

a mobile switching center in communication with the base station and adapted to receive the 911 emergency call and separately route the voice portion and the data portion through the 911 emergency voice/data telecommunication network to an appropriate emergency service organization;

a mobile positioning center in communication with the mobile switching center and adapted to receive a 911 emergency call origination request associated with

the 911 emergency call from the mobile switching center, determine an appropriate public safety access point in an emergency services network for receiving the 911 emergency call, and communicate the appropriate public safety access point for receiving the 911 emergency call to the mobile switching center; and

a position determining entity in communication with the mobile positioning center and the mobile switching center adapted to receive a geographic position request from the mobile positioning center associated with the 911 emergency call and, in response to the geographic position request, initiating a position determining process to determine a location of the mobile station that originated the 911 emergency call.

17. The 911 emergency voice/data telecommunication network as set forth in claim 16 wherein origination of the 911 emergency call from the mobile station includes communication of an origination request message to the mobile switching center through the base station, the origination request message specifying a 911 emergency call service option.

18. The 911 emergency voice/data telecommunication network as set forth in claim 17 wherein at least one of the base station, mobile switching center, mobile positioning center, and positioning determining entity respond to the 911 emergency call service option by allocating resources to the 911 emergency call with priority over non-emergency calls.

19. The 911 emergency voice/data telecommunication network as set forth in claim 16 wherein the mobile station adds a timestamp to the captured sound and image information communicated in the 911 emergency call.

20. The 911 emergency voice/data telecommunication network as set forth in claim 16 wherein the mobile switching center adds a timestamp to the captured sound and image information communicated in the 911 emergency call.

21. The 911 emergency voice/data telecommunication network as set forth in claim 16, the mobile switching center including:

a base station communication interface in communication with the base station and adapted to receive the voice portion and data portion of the 911 emergency call;

a voice channel in communication with the base station communication interface and adapted to receive the voice portion of the 911 emergency call;

a data channel in communication with the base station communication interface and adapted to receive the data portion of the 911 emergency call;

a network communication interface in communication with the voice channel and the data channel and adapted to receive the voice portion of the 911 emergency call from the voice channel and the data portion of the 911 emergency call from the data channel; and

a 911 voice/data origination control process in communication with the base station communication interface, voice channel, data channel, and network communication interface to control routing of the 911 emergency call to the appropriate emergency service organization.

22. The 911 emergency voice/data telecommunication network as set forth in claim 21 wherein the data channel is compatible with PPP/IP communication protocol.

23. The 911 emergency voice/data telecommunication network as set forth in claim 16 wherein the mobile switching center separately routes the voice portion and data portion of the 911 emergency call to the appropriate public safety access point based at least in part on the location of the mobile station that originated the 911 emergency call.

24. The 911 emergency voice/data telecommunication network as set forth in claim 23 wherein the appropriate public safety access point is responsible for providing emergency service to the mobile station based on the location of the mobile station.

25. The 911 emergency voice/data telecommunication network as set forth in claim 23 wherein the appropriate public safety answering point includes a 911 operator station adapted to receive the voice portion and data portion of the 911 emergency call and the emergency service network further includes at least one of a law enforcement station, a fire department station, an emergency medical service station, a law enforcement mobile unit, a fire department mobile unit, and an emergency medical service mobile unit wherein each station and each mobile unit is adapted to receive the voice portion and data portion of the 911 emergency call, wherein the 911 operator station dispatches the voice portion and data portion of the 911 emergency call to at least one of a law enforcement station, a fire department station, an emergency medical service station, a law enforcement mobile unit, a fire department mobile unit, or an emergency medical service mobile unit based on interpretation of emergency situation associated with the 911 emergency call.

26. A method for communicating a mobile-originated 911 emergency call to an appropriate public safety answering point, the method including the steps:

- a) receiving a first origination request message for the 911 emergency call from a mobile station at a mobile switching center via a base station serving the mobile station, the 911 emergency call including sound and image information from the vicinity of the mobile station;
- b) communicating a second origination request message for the 911 emergency call from the mobile switching center to a mobile positioning center;
- c) communicating a geographic position request message from the mobile positioning center to a position determining entity;
- d) determining a location of the mobile station that originated the 911 emergency call at the positioning determining entity;
- e) communicating the location of the mobile station that originated the 911 emergency call from the positioning determining entity to the mobile positioning center in a geographic position return result message;

f) determining the appropriate public safety answering point for receiving the 911 emergency call at the mobile positioning center from the location of the mobile station that originated the 911 emergency call;

g) communicating routing information for the appropriate public safety answering point from the mobile positioning center to the mobile switching center in a return result message in response to the second origination request message; and

h) separately routing a voice portion and a data portion of the 911 emergency call to the appropriate public safety answering point.

27. The method set forth in claim 26 wherein the sound information is communicated in the data portion of the 911 emergency call.

28. The method as set forth in claim 26 wherein the image information includes at least one of a still frame image, a sequence of still frame images, or motion video.

29. The method as set forth in claim 28 wherein the image information is communicated in the data portion of the 911 emergency call.

30. The method as set forth in claim 26 wherein the first origination request message includes a 911 emergency call service option.

31. The method as set forth in claim 30 wherein the base station and mobile switching center respond to the 911 emergency call service option by allocating resources to the 911 emergency call with priority over non-emergency calls.

32. The method as set forth in claim 26 wherein the mobile station or other equipment in the communication system adds a timestamp to the sound and image information communicated in the 911 emergency call.

33. The method as set forth in claim 26 wherein the mobile switching center adds a timestamp to the sound and image information communicated in the 911 emergency call.

34. The method as set forth in claim 26 wherein the first determining step (step d)) includes exchange of a series of messages between the positioning determining entity and the mobile station that originated the 911 emergency call.

35. The method as set forth in claim 26 wherein the second determining step (step f)) includes retrieving the routing information for the appropriate public safety access point from a database associated with the mobile positioning center based on the location of the mobile station that originated the 911 emergency call.

36. The method as set forth in claim 26 wherein the routing information communicated in step g) includes the routing information for the voice portion of the 911 emergency call and a static IP address for the data portion of the 911 emergency call.

37. The method as set forth in claim 36 wherein the voice portion of the 911 emergency call is routed to the PSAP and the data portion of the 911 emergency call is routed to the static IP address in step h).

38. A caller device for originating a 911 emergency call having a voice portion and a data portion, including:

a microphone to capture sound information from the vicinity of the caller device;

a camera to capture the image information from the vicinity of the caller device; and

a 911 button wherein the 911 emergency call is originated after activation of the 911 button;

wherein the caller device communicates the captured sound and image information in the 911 emergency call, at least part of the captured sound and image information being communicated in the data portion of the 911 emergency call;

39. The caller device as set forth in claim 38 wherein the captured sound information is communicated in the data portion of the 911 emergency call.

40. The caller device as set forth in claim 38 wherein the captured image information includes at least one of a still frame image, a sequence of still frame images, or motion video.

41. The caller device as set forth in claim 40 wherein the captured image information is communicated in the data portion of the 911 emergency call.

42. The caller device as set forth in claim 38, the caller device further including:  
a safety mechanism in operative communication with the 911 button wherein the 911 emergency call is originated after operation of the safety mechanism in a predetermined relation to activation of the 911 button.

43. The caller device as set forth in claim 38 wherein the controller adds a timestamp to the captured sound and image information communicated in the 911 emergency call.